G. Earle et al.

09/814,315

REMARKS

Amendments to the Specification

The Abstract is amended to remove the superfluous phrase, "The present invention . . ."

No new matter is added via this amendment.

Amendments to the Claims

Claims 1, 14 and 22 are amended. New claims 23-25 are added. Upon entry of the present amendments, claims 1-25 are pending.

Claims 1 is amended to specify that the entity model represents *at least one* entity. This amendment, which is non-substantive, is made to make the text of this subpart of the claim consistent with the following three subparts.

Claim 1 is also amended to specify that the transaction model *represents* at least one transaction *in which the entity is involved*. Support for this amendment is found, *e.g.*, at page 14, lines 5-12.

Further still, claim 1 is amended to specify that the list model is associated with at least one step in the transaction and comprises a list of at least one state or set of information that can be attained by or is associated with the entity involved in the transaction. Support for this amendment is found at page 15, line 27, through page 16, line 4.

Finally, claim 1 is amended to specify that the task model *represents* at least one task associated with the transaction. Support for this amendment is found at page 14, line 28, through page 15, line 7.

Amendments similar to those made to claim 1 are likewise made to claim 14 and 22.

Claims 14 and 22 are also amended to properly reflect that the "transaction" referred to in the description of the list model/means has an antecedent basis in the preceding description of the transaction model/means. This amendment is consistent with the description provided, *e.g.*, at pages 14-17 of the subject application.

New claim 23 is supported at page 12, lines 15-16.

G. Earle *et al.* 09/814,315

New claim 24 is supported at page 16, lines 6-9.

New claim 25 is supported at page 14, line 30, through page 15, line 10.

Each of the grounds for objection and rejection cited in the Office Action is addressed below, under an appropriate sub-heading.

Objection to the Abstract

An objection was raised against the Abstract because it included the phrase, "The present invention." The Abstract accordingly is amended herein to remove the offending phrase, thereby remedying this ground for objection.

35 U.S.C. §102: Novelty of the Claims

Claims 1, 3-4, 14 and 22 were rejected under 35 U.S.C. §102(b), as being anticipated by Oracle® Applications Concepts, Release 11 for UNIX, 1998 ("OraAPP").

Of these claims, claims 1, 14 and 22 are independent, while claims 3 and 4 depend from independent claim 1, and therefore incorporate its limitations.

A) Claim 1:

Claim 1, as amended, is directed to a computerized system including, *inter alia*, a database server comprising a data architecture representing a business process, wherein the data (with reference to an example provided in the specification) comprises:

- (a) an entity model representing at least one entity (e.g., "any stakeholder in or associated with an organization that uses the system" responsible for implementing at least a portion of the business process;
- (b) a transaction model representing at least one transaction (e.g., "the selling of a home"²) in the business process in which the entity is involved;
- (c) a list model representing at least one step (e.g., "[s]ign listing agreement with homeowner, [g]enerate real estate listing, [s]ubmit listing to multiple-

¹ Subject application, page 12, lines 14-15

² *Id.*, page 14, lines 10-12.

listing service, [h]old open house, etc."³) in the transaction, the list model comprising a list of at least one state or set of information (e.g., a list of "the customer entities in a particular marketing campaign, the status of a customer in a sales cycle, or the stage of a new employee in a training program"⁴) that can be attained by or associated with the entity (e.g., "real estate agent" and "real estate agent's secretary"⁵) involved in the transaction (e.g., selling a home); and

(d) a task model associated with the list, the task model representing at least one task (e.g., hosting the open house and placing a newspaper advertisement⁶) associated with the at least one step (e.g., holding an open house) in the transaction (e.g., selling a home).

As defined in amended claim 1, the entity, transaction, and task models include a representation of a (real-world / business) entity, transaction, and task, respectively. Accordingly, these models do not merely represent the simple execution of software code (e.g., the manipulation, transformation and compilation of data) but rather actual business expressions, as evidenced by the examples provided in parentheses, above. For example, the entity represented by the entity model can be an organization, a human, or a location, as specified in new claim 23.

Moreover, the unique "list model," as described, enables virtually infinite or limitless attribution (relationships) between the representations of the entities, transactions and tasks. And these attributions can be made without making any structural modifications to the database and without needing to be predefined. These entity, list, transaction, and task models can be referenceable objects (as specified in claim 3) that inter-operate to dynamically model a business process that can be changed without changing the data model itself.

³ *Id.*, page 14, lines 12-15.

⁴ *Id.*, page 16, lines 2-5.

⁵ *Id.*, page 14, lines 15-16, and page 15, lines 5-7.

⁶ *Id.*, page 15, lines 2-7.

Further still, the list model of claim 1 can dynamically create a process by virtue of the list being defined and associated with a step in the transaction as a function of its independent character. In addition, the list can also be associated with the entity, as specified in new claim 25. Moreover, the list model is capable of having associated meta-data, as specified in claim 13 (for example, storing information about the connection between an entity and a transaction). In yet another embodiment, consistent with claims 17 and 20, the list model can track the existence and duration of an association between an entity and a transaction and trigger actions based thereon. In still other embodiments, as specified in claim 21, action- and time-based rules are recursive (e.g., changes in one list can automatically trigger changes to a second list, while rules associated with the second list can effect changes in a third list, etc.⁷).

Additionally, as specified in new claim 24, the existence of the list model and the information stored therein, as well as the associations established therewith, also enables an entity to be associated with a list and to therefore have various attributes associated with the entity without needing to make any modifications to the entity model, itself.

The United States Patent and Trademark Office asserted that OraAPP discloses each of the entity model, transaction model, list model and task model, as defined in the earlier version of claim 1.

For the "list model," the United States Patent and Trademark Office cited to the "internal concurrent manager" in OraApp. ⁸ As described therein, the internal concurrent manager monitors the database, controls other computer-process managers, and manages computer-process requests. Accordingly, the internal concurrent manager manages computational processes. However, neither the internal concurrent manager nor any of the objects that it manages can be equated with the "list model" of claim 1. Rather, the tables in the internal concurrent manger of OraAPP appear to be no more than queues of requests to be executed as a separate thread in the background, independent and in concert with outer process (*e.g.*, handling load balancing and distributing management of programs across servers).

⁷ See subject application, page 18, lines 5-17; and page 19, line 19, through page 20, line 22.

⁸ OraAPP, pages 1-10 and 2-4.

APPLICANTS: U.S.S.N.:

G. Earle et al.

09/814,315

As recited in claim 1, the list model represents a step in a transaction in a business process and comprises a list of at least one state or set of information associated with at least one entity involved in the transaction. Applicants fail to see any corollary components in the cited text of OraAPP. Rather, information in OraAPP appears to be associated with an entity via a traditional and static three-level taxonomy (i.e. TYPE=NAME, Level 1, Sub Level). If this rejection is to be maintained, Applicants respectfully request that the United States Patent and Trademark Office clarify whether it is equating the internal concurrent manager, itself, or its operation with the "list model" and, if not, to specifically identify which component it is equating with the "list model." Furthermore, Applicants respectfully request that the United States Patent and Trademark Office specifically identify in OraAPP, where it finds the following highlighted components: the "step in a transaction in a business process" that the list model represents, as well as the *list* of at least one state or set of information that can be attained by or associated with the transaction-associated entity that is included in the list model.

In addition, for the "task model," the United States Patent and Trademark Office equated the running of concurrent process in OraAPP⁹ with the "task model" of claim 1. Although the concurrent processing in OraAPP may pertain to computer-processing tasks, it does not appear to refer to the "tasks" identified in claim 1 (i.e., tasks associated with at least one step in a transaction of a business process).

As noted, above, an example of such a transaction in a business process is the selling of a home, while examples of tasks that are represented by the task model in this context include placing a newspaper advertisement and hosting the open house. 10 Applicants fail to see any corollary components in OraApp. If this rejection is to be maintained, Applicants respectfully request that the United States Patent and Trademark Office identify where in OraAPP it finds the tasks represented in the task model that are associated with a step in the transaction in the business process.

⁹ *Id.*, pages 1-9 and 1-10.

¹⁰ Subject application, page 14, line 5, through page 15, line 15.

APPLICANTS: U.S.S.N.:

G. Earle *et al.* 09/814,315

Absent a more-specific matching of components in OraAPP with the recited components in Applicants claim 1, Applicants respectfully request that this ground for rejection against claims 1, 3 and 4 be reconsidered and withdrawn.

B) Claim 14:

Claim 14, as amended, is directed to a method that provides a database server that has a data architecture representing a business process and comprising, as in claim 1, an entity model, a transaction model, a list model and a task model. As in claim 1, the list model represents at least one step in a transaction in a business process and comprises a list of at least one entity involved in the transaction, while the task model is associated with the list and represents at least one task associated with the at least one step in the transaction.

Accordingly, Applicants submit that these limitations distinguish amended claim 14 from the teachings of OraAPP unless the United States Patent and Trademark Office can point to these components in OraAPP, though Applicants do not believe that they can be found. Absent these teachings in OraAPP, Applicants respectfully request that this ground for rejection against amended claim 14 be reconsidered and withdrawn.

C) Claim 22:

Claim 22, as amended, is directed to a computerized system comprising database server means having a data architecture representing a business process and comprising an entity means, transaction means, list means, and task means.

Like the "list model" of claims 1 and 14, the "list means" of amended claim 22 represent at least one step in a transaction in a business process and comprise a list of at least one entity involved in the transaction. Further, like the "task model" of claims 1 and 14, the "task means" of amended claim 22 are associated with the list and represent at least one task associated with the at least one step in the transaction in the business process.

Accordingly, Applicants submit that these limitations distinguish amended claim 22 from the teachings of OraAPP, unless the United States Patent and Trademark Office can point to these components in OraAPP. Absent these teachings in OraAPP, Applicants respectfully request that this ground for rejection against amended claim 22 be reconsidered and withdrawn.

APPLICANTS: U.S.S.N.: G. Earle *et al.* 09/814,315

35 U.S.C. §103: Non-Obviousness of the Claims

Claims 2, 5-13 and 15-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over OraAPP, as applied to claims 1, 14 and 22, above, and further in view of Oracle® Sales and Marketing Connected Client User's Guide, Release 11, March 1988 ("OraSAM").

Claims 2 and 5-13 all depend from claim 1 and, therefore, incorporate its limitations. On the other hand, claims 15-21 all depend from amended claim 14 and, therefore, incorporate its limitations.

In addition to not disclosing the list model and task model, as these components are characterized in claim 1 and in amended claim 14, OraAPP also fails to provide any suggestion of or motivation for including such components. OraSAM does not remedy these deficiencies, as it too fails to disclose, suggest or motivate the inclusion of a list model that represents at least one step in a transaction in a business process and that comprises a list of at least one entity involved in the transaction. Furthermore, OraSAM also fails to disclose, suggest or motivate inclusion of a task model that is associated with the list and that represents at least one task associated with the at least one step in the transaction in the business process.

Absent a disclosure, suggestion, or motivation in either OraAPP or OraSAM of/for including the list model and the task model, as characterized in the claims, Applicants respectfully submit that these claims are non-obvious over the cited references and respectfully requests that these grounds for rejection be reconsidered and withdrawn.

CONCLUSION

On the basis of the foregoing amendments, Applicants respectfully submit that the pending claims are in condition for allowance. If there are any questions regarding these

APPLICANTS: **U.S.S.N.:**

G. Earle et al. 09/814,315

amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

Robert J. Sayre, Reg. No. 42,124 Attorney for Applicants MINTZ, LEVIN, COHN, FERRIS, GLOVSKY and POPEO, P.C.

Address all written correspondence to

Customer No. 30623 Tel: (617) 542-6000

Fax: (617) 542-2241